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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,681	07/14/2003	Yoshihisa Kamo		4131
24956	7590	12/14/2005	EXAMINER	
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			PHAM, VAN T	
		ART UNIT		PAPER NUMBER
				2656

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/617,681	KAMO ET AL.
	Examiner VAN T. PHAM	Art Unit 2656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 56-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 56-59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07/14/2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  - 1) Certified copies of the priority documents have been received.
  - 2) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

***Priority***

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

This application is a continuation of applications 10/122,301, 09/788,392, 09/522,015, 09/357,372, 08/934,201, 08/472,460 and divisional of application 07/725672.

2. An oath/declaration or application data sheet is received on 07/14/2003. However, foreign applications No. 2-183936, filed on 07/13/1990 and 2-260439, filed on 10/01/1990 have not received.

***Drawings***

3. Figures 2-3, 12 and 14 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 56-59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 33-34, respectively, of Patent No. 6,286,108 (No. 108'). Although the conflicting claims are not identical, they are not patentably distinct from each other because all the features recited in claims 56-59 of the present application are included in claims 1-2 and 33-34, respectively, of Patent No. 6,286,108, despite a slight difference in wording.

Claims 58 and 59 do not claim the "control combination" and its associated functions as being claimed in claim 33 and 34. However, the disk system as claimed is would have been obvious in light of claim 33 and 34. Because: obviously, the disk system of claims 58 and 59 would have included some kind of timing clock in order to indicate a start up at some point to one of ordinary skill in the art.

6. Claims 56-57 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-11 of U.S. Patent No. 6,397,294. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the features recited in claims 56-57 of the present application are included in claims 10-11 of Patent No. 6,397,294 despite a slight difference in wording.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 56-59 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 56 and 58 have phase “*some*” is indefinite and vague.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claim 56-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Dougherty (US 4,967,304).

Regarding claim 56, see Figs. 2-4, discloses a method of starting up spindle motors in an array system, comprising the following steps: supplying current to start up some of said spindle motor initially; and then supplying current to start up at least one more of said spindle motors (see Fig. 2, the starting and operating motor performance curve 13 for high efficiency motor and the tailored motor protection curve 14 are both expressed as a time function of multiples of rated current ad see col. 2, lines 54-68).

Regarding claim 57, see Figs. 2-4, discloses a method of starting up spindle motors in an array disk as claimed in claim 56, wherein said supplying steps are performed such that a spindle motor in start-up is supplied with a start-up current, and a spindle motor at steady-state is supplied with a steady-state current that is lower than said start-up current (see Fig. 2, and point 1 defines the steady state operating current for the motor and see col. 1, line 55- col. 2. line 2).

Regarding claim 58, see Figs. 2-4, discloses an array disk system, comprising: a plurality of disk drive spindle motors (see abstract and see Fig. 2, motors rated 13, 14); and a power supply electrically connected to said plurality of disk drive spindle motors (see Fig. 3, power supply 24), wherein said power supply supplies current to start up some of said spindle motors initially, and then supplies current to start up at least one more of said spindle motor (see Fig. 2 and col. 1, line 55 – col. 2, line 2).

Regarding claim 59, see Figs. 2-4, discloses an array disk system as claimed in claim 58, wherein said power supply supplies a spindle motor in start-up with a start-up current, and supplies a spindle motor at steady state with a steady state current that is lower than said start-up current (see Fig. 2, and point 1 defines the steady state operating current for the motor and see col. 1, line 55- col. 2. line 2).

*Cited References*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

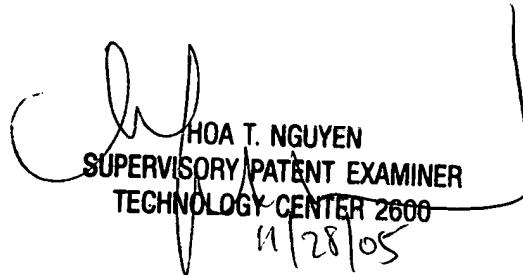
The cited references relate to a digital circuit interrupter includes a microprocessor programmed for tailored over current protection (Dougherty US 4,967,304) and disk system and power-on sequence for the same (Kamo et al US 6,397,294 and US 6,286,108).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

  
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11/28/05